artdaq - Feature #13432

Enable the shared memory Transfer plugin to transfer events with 100% reliability

08/03/2016 02:38 PM - John Freeman

Status: Closed Start date: 08/03/2016 **Priority:** Normal Due date: 10/01/2016

Assignee: Eric Flumerfelt % Done: 0%

Category:

Estimated time: 40.00 hours

Target version: v2_00_00

Experiment: Co-Assignees:

Description

Currently, there's no guarantee that all events sent from the data logger to the monitoring aggregator get processed by the monitoring aggregator. This is a natural consequence of the fact that the art modules used for monitoring may take longer to process an event than it takes an event to pass through the data logger, and the fact that monitoring by design is unable to exert backpressure on the system. However, with a plan in place to replace the monitoring aggregator with a dispatcher which, rather than running art modules for monitoring purposes, relays events to monitors (Issue #13430), it would be ideal that the dispatcher receive 100% of events which pass through the data logger (we of course will still be unable to guarantee that monitors process 100% of the events, since we have no control over how long it takes other groups' art modules to process events).

History

#1 - 11/14/2016 01:19 PM - Eric Flumerfelt

- Target version set to 576

#2 - 01/03/2017 04:45 PM - Eric Flumerfelt

- Status changed from New to Resolved
- Assignee set to Eric Flumerfelt

The Shmem transfer plugin has been reimplemented with a circular buffer and optional locking between the reader and writer. This is part of the feature/PluginBasedDataTransfer branch.

#3 - 01/11/2017 08:50 AM - Eric Flumerfelt

- Status changed from Resolved to Closed
- Target version changed from 576 to v2_00_00

10/21/2020 1/1